

CLAIMS

We claim:

1. A method to selectively disseminate information in a distributed computer system having a plurality of originating and target nodes, the method comprising the steps of:

(a) defining a set of publishers authorized to provide information to the system and associating each publisher with an originating node of the system;

(b) defining a set of subscribers authorized to receive information from the system and associating each subscriber with a target node of the system;

(c) publishing a first informational message, wherein the first informational message is defined by a set of attributes related to the content of the informational message;

(d) allowing each subscriber to establish a set of content filters to identify the attributes of informational messages of interest to each subscriber;

(e) screening the first published informational message to determine the subscribers that should receive the informational message based on the subscriber's content filters;

(f) providing a description of the first informational message to the target nodes associated with the subscribers determined to receive the information;

(g) reviewing the description to determine if the target node already contains the first informational message;

(h) notifying the originating node as to whether the target node already contains the first informational message; and

(i) transferring the first published informational message from the originating node associated with the publisher to the target nodes associated with those subscribers requiring the first informational message.

2. The method of claim 1 further comprising the steps of:

(j) allowing each subscriber to establish automatic content-based communication triggers;

(k) screening the first informational message received by a subscriber to determine if the content of the message or its attributes meet an established communication trigger; and

(l) publishing a second informational message in the event the trigger is met.

3. The method of claim 1 further comprising the step of retrieving a third informational message by the subscriber related to the first informational message in the event a trigger is met.

4. The method of claim 3 wherein the step of publishing a second informational message comprises the step of publishing the third informational message by the subscriber.

5. The method of claim 1 wherein the step of screening is performed by the originating node associated with the publisher.

6. The method of claim 1 further comprising the steps of:

- (a) associating a data repository with a published informational message, wherein the data repository contains additional information related to the content of the informational message; and
- (b) allowing a subscriber receiving the published informational message to access the data repository associated with the received informational message.

7. The method of claim 1 further comprising the steps of:

- (a) associating a data repository with a published informational message, wherein the data repository contains additional information related to the content of the informational message;
- (b) publishing attributes identifying the information contained in the data repository;

(c) screening the published attributes to determine the subscribers that should receive the additional information contained in the data repository based on the subscriber's content filters; and

(d) providing the additional information to the target nodes associated with those subscribers requiring the additional information.

8. The method of claim 1 further comprising the step of enrolling a publisher as a verified provider of information to the system.

9. The method of claim 1 further comprising the step of enrolling a subscriber as a verified recipient of information from the system.

10. The method of claim 1 wherein the publishers are selected from the group comprising users, external systems, external programs, and hardware devices.

11. The method of claim 1 wherein the step of publishing a first informational message comprises the steps of:

(a) associating credentials with each publisher that define the types of informational messages each publisher is allowed to publish to the system; and

(b) evaluating the informational message prior to publication to ensure that the publisher has the appropriate system credentials to publish the informational message.

12. The method of claim 1 wherein the step of transferring the first published informational message comprises the step of verifying that the subscriber is authorized to received the published informational message.

13. The method of claim 1 wherein the step of publishing a first informational message comprises the steps of defining a plurality of event types and upon the occurrence of a specific event of a defined event type, publishing an informational message containing information relating to the occurrence of the specific event.

14. The method of claim 1 wherein each subscriber has an associated public encryption key and wherein each transferred informational message is encrypted using the subscriber's public encryption key.

15. A computer program product on a computer readable medium for use in a distributed computer system having a plurality of originating and target nodes, the computer program product comprising:

(a) instructions for defining a set of publishers authorized to provide information to the system and associating each publisher with an originating node of the system;

(b) instructions for defining a set of subscribers authorized to receive information from the system and associating each subscriber with a target node of the system;

(c) instructions for publishing a first informational message, wherein the first informational message is defined by a set of attributes related to the content of the informational message;

(d) instructions for allowing each subscriber to establish a set of content filters to identify the attributes of informational messages of interest to each subscriber;

(e) instructions for screening the first published informational message to determine the subscribers that should receive the informational message based on the subscriber's content filters;

(f) instructions for providing a description of the first informational message to the target nodes associated with the subscribers determined to receive the information;

(g) instructions for reviewing the description to determine if the target node already contains the first informational message;

(h) instructions for notifying the originating node as to whether the target node already contains the first informational message; and

(i) instructions for transferring the first published informational message from the originating node associated with the publisher to the target nodes associated with those subscribers requiring the first informational message.